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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,939	12/13/2001	Takashi Norimatsu	PW 0277026 H7608US	2669

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EXAMINER	
FLEARY, CAROLYN FATIMAH	
ART UNIT	**PAPER NUMBER**
2152	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/021,939	NORIMATSU ET AL.	
	Examiner	Art Unit	
	Carolyn F. Fleary	2152	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 April 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/31/01, 3/1/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

AD

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. JP 2000-385691 , filed on 12/19/2000.

Response to Amendment

1. Examiner acknowledges amended claims. Applicant's request for reconsideration of the restriction requirement has been acknowledged in light of amended claims, the restriction requirement of the previous Office action is withdrawn.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1,4,12,13, and 19 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Turner (5,339,311).

In regards to claim 1, and 4, Turner discloses a communication method that is executed by a transmission unit [22] and a reception unit[26], comprising:

- packetizing sporadically input data to accompany timing information representing their input timings (col. 1 ll. 54-63);
- transmitting packetized input data accompanying the timing information from the transmission unit (col. 1 ll. 54-63);
- receiving the packetized input data accompanying the time timing information by the reception unit(col. 1 ll. 54-63); and
- outputting the packetized input data at timings based on the timing information from the reception unit (col. 1 ll. 64- col. 2 ll. 11, col. 2 ll. 15-17).

In regards to claim 12, Tuner discloses a reception unit [26] for use in a communication system performing packet communications, comprising:

- a receiver [26/44,]for receiving packetized input data corresponding to sporadically [abs, col. 3 ll. 7-22]input data from a transmission unit [26/40], together with timing data [e.g. timestamp]representing their input timings (col. 1 ll. 54-63),
- a buffer memory [e.g. buffer] for accumulating the packetized input data received by the receiver (col. 1 ll. 58-63);
- a timing data register [e.g. buffer controller-46/42] for storing the timing data [e.g. age, timestamp, delta T] received by the receiver (col. 1 ll. 64- col. 2 ll. 11); and
- a controller for outputting the packetized input data read from the buffer memory at timings based on the time timing data (col. 1 ll. 64- col. 2 ll. 11, col. 2 ll. 15-17)

In regards to claim 13, Turner discloses the reception unit [26] according to claim 12, wherein the timing data register [46] is a shift register for storing the timing data (col. 4 ll. 12-20] having a prescribed number of bits every prescribed time corresponding to a packet timing (col. 4 ll. 20-65]).

In regards to claim 19, Tuner discloses each and every component and associated functionality of the claimed components of claim 12, which when executed performs packet communications , comprising:

- receiving packetized input data corresponding to sporadically input data from a transmission unit together with timing data representing their input timings(col. 1 ll. 54-63);
- accumulating the received packetized input data by a buffer memory(col. 1 ll. 58-63)y;
- storing the received timing data in a timing data register (col. 1 ll. 64- col. 2 ll. 11]);
  and
- outputting the packetized input data read from the buffer memory at timings based on the time timing data(col. 1 ll. 64- col. 2 ll. 11, col. 2 ll. 15-17].

as shown in the rejection of claim 12 above and hence applies to claim 19.

4. Claims 1-7, 10-12, and 14-21 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Sasaki (US 6,248,945).

In regards to claim 1, Sasaki discloses a communication method that is executed by a transmission unit [2701-2703] and a reception unit [2701-2703], comprising:

- packetizing sporadically input data to accompany timing information representing their input timings (col. 15 ll. 18-30, col. 25 ll. 59-63, col. 26 ll. 1-39, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7));
- transmitting packetized input data accompanying the timing information from the transmission unit ((col. 15 ll. 18-30, col. 25 ll. 59-63, col. 26 ll. 1-39, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7);
- receiving the packetized input data accompanying the time timing information by the reception unit(abstract, col. 8 ll. 32-35,60-63); and
- outputting the packetized input data at timings based on the timing (col. 8 ll. 60-63)

In regards to claim 4, Sasaki discloses a communication system (fig. 27) comprising:

- a transmission unit [2701-2703] for packetizing sporadically input data to accompany time timing information representing their input timings and for transmitting packetized input data accompanying the time timing information(col. 15 ll. 18-30, col. 25 ll. 59-63, col. 26 ll. 1-39, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7); and
- a reception unit [2701-2703]for receiving the packetized input data accompanying the time timing information from the transmission unit (col. 32 ll. 8-49),

In regards to claims 7 and 16, Sasaki discloses transmission unit [2701-2703] (col. 5 ll. 63-67, col. 10 ll. 11-15) for use in a communication system performing packet communications, comprising:

- input device[130] for inputting sporadically input data (col. 11. ll. 44-45, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7)

- a buffer memory [103] for accumulating the sporadically input data, wherein the buffer memory is periodically initialized every prescribed time [predetermined time lapses] (col. 15 ll. 18-30, col. 25 ll. 59-63, col. 26 ll. 1-39, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7);
- a timing data register [102/104] for storing timing data representing input timings of the sporadically input data(col. 15 ll. 18-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7); and
- a controller [101] for periodically checking store content of the timing data register at every prescribed time, wherein the controller performs packetizing of the sporadically input data stored in the buffer memory, and the packetized input data accompanying the timing data read from the timing data register are subjected to transmission (col. 11 ll. 52-57, col. 15 ll. 34-37, col. 25 ll. 14-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7).

In regards to claim 12 and 19, Sasaki discloses a reception unit [2701-2703] for use in a communication system performing packet communications, comprising:

- a receiver [107] for receiving packetized input data corresponding to sporadically input data from a transmission unit [2701-2703], together with timing data [e.g. timestamp]representing their input timings ((col. 15 ll. 18-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7)),
- a buffer memory [103] for accumulating the packetized input data received by the receiver (col. 15 ll. 18-30, col. 25 ll. 59-63, col. 26 ll. 1-39, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7);
- a timing data register [102/104] for storing the timing data received by the receiver (col. 15 ll. 18-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7); and

- a controller [101] for outputting the packetized input data read from the buffer memory at timings based on the time timing data (col. 11 ll. 52-57, col. 15 ll. 34-37, col. 25 ll. 14-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7)

In regards to claims 2, and 5,10, 14, 17 and 20 Saskaki discloses wherein the sporadically input data correspond to MIDI data[114,130] that are produced and input to the transmission unit(input via [130]) in a sporadic manner(col. 5 ll. 35- 38 col. 15 ll. 18-30).

In regards to claims 3, 6, 11, 15, 18, and 21 are Sasaki discloses wherein the transmission unit [2701-2703] transmits the packetized input data accompanying the timing information to the reception unit [2701-2703] via a network (col. 31 ll. 20-29, col. 5 ll. 38-39).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 8-9,13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sasaki (US 6,248,945) in view Turner (5,339,311).

In regards to claim 8, Saskai discloses the transmission unit according to claim 7,

Sasaki does not discloses wherein the prescribed time corresponds to a packet timing that occurs by a prescribed number of shift timings corresponding to bits of the

timing data respectively, so that the input timings are represented by the bits of the timing data.

Turner discloses wherein the prescribed time corresponds to a packet timing that occurs by a prescribed number of shift timings corresponding to bits of the timing data respectively, so that the input timings are represented by the bits of the timing data (col. 4 ll. 12-col. 5 ll. 4).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Sasaki by having packet timing that occurs by a prescribed number of shift timings corresponding to bits, as taught by Turner in order to determine the sequence in which packets thereby by controlling the transmission of data packets (col. 2 ll. 11-47)

In regards to claim 9 and 13 , Sasaki discloses the transmission/reception unit [2701-2703] according to claim 7, wherein the timing data register [102/104] stores the timing data (col. 15 ll. 18-30, col. 31 ll. 20-29, col. 31 ll. 50 –col. 32 ll. 7)

Sasaki does not disclose wherein the timing data register is a shift register for storing the timing data having a prescribed number of bits every prescribed time corresponding to packet timing

Turner discloses wherein a timing data register [46] is a shift register for storing the timing data (col. 4 ll. 12-20) having a prescribed number of bits every prescribed time corresponding to a packet timing (col. 4 ll. 20-65]).

It would be obvious to one of ordinary skill in the art at the time of the invention to modify Sasaki by having a shift register, as taught by Turner in order to determine the sequence in which packets thereby by controlling the transmission of data packets (col. 2 ll. 11-47)

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure that may be a applied to all claims

- Neumann et al. (US 6175,872). Collaborative Environment for Syncronizing Audio from remote devices. Neumann et al. may be applied to claims 2,3,14,15,20, and 20 for disclosint sporadic input and transmission of MIDI data via network in order to have musicans at remote sites play and hear other musicians in rela-time as they play music; where musicans are the producers of sporadic input. As well as for having interactive collaborative and synchronized, real-time playing of instruments accorss communications network of remote systems. (Col. 3 ll. 6-50, all claims)
- Nishikawa; Masashi et al. (US 5129302) Automatic data-prereading playing apparatus and sound generating unit in an automatic musical playing system. Nishikawa
- Utsumi; Naoto et al. (US 5670732) Midi data transmitter, receiver, transmitter/receiver, and midi data processor, including control blocks for various operating conditions. Utsumi et al. teach a transimitter unit and receiver unit for transmitting and receiving MIDI data.
- Mohrbacher; BernardUS (US 5902949) Musical instrument system with note anticipation
- Manabe; Hajime (US 5300725) Automatic playing apparatus. Manabe teach packetizing timing information and MIDI data for outputting MIDI data in a correct sequence.

- Okamura; Mashiro et al. (US 5286907) Apparatus for reproducing musical accompaniment information
- Turner; Jonathan S. et al. (US 6816492) Resequencing packets at output ports without errors using packet timestamps and timestamp floors
- Budrikis; Zigmantas L et al. (US 6876670) Method and apparatus for transfer of real time signals over packet networks
- Kikuchi; Takeshi et al. (US 6757303) Technique for communicating time information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn F. Fleary whose telephone number is (571) 572-7218. The examiner can normally be reached on 8:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (571)272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Carolyn F Fleary
Examiner
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CFF

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